

Allied Textile Printers (The Gun Mill)
Van Houten and Mill Streets
Paterson, New Jersey
Passaic County

HAER No. NJ-17

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NJ,
16-PAT,
6 -

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

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NJ,
16-PAT,
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HISTORIC AMERICAN ENGINEERING RECORD

ALLIED TEXTILE PRINTERS
(The Gun Mill)

NJ-17

DATE: 1836

LOCATION: Van Houten and Mill Streets
Paterson, New Jersey

DESIGNED BY: unknown

OWNER: Allied Textile Printers

SIGNIFICANCE: The remains of the Patent Arms Manufacturing Co., constructed in 1836, comprise some of the oldest building stock in the Historic District of Paterson. The lot was originally leased in 1813 to a firm which constructed a rolling mill and nail factory there. In 1836, the entire lot was leased to the Patent Arms Manufacturing Company. The Company tore down the nail factory and built a four story brownstone structure measuring 100 X 40 feet, in which the manufacture of Colt revolvers was undertaken. The first silk processing in Paterson also took place in this structure. In the 1840s, as the demand for silk grew, the mill was expanded by the addition of three new buildings. The gun factory closed in 1842, and the premises was devoted to various textile industries for many years, until the 1870s when Joshua Mason began to manufacture radiators in one of the outbuildings. Textile manufacturers have continued to use most of the mill's space to this date.

TRANSMITTED BY: Monica E. Hawley

GUN MILL LOT

"Beginning for the same at the distance of 9 feet from the west side of the head race leading from the canal in Mill and Boudinot Streets to the vacant mill lot situated between the Passaic and Mallory Mill lots, the said point being distant 71 feet from the southwest corner of the Passaic Mill office and in a direct line with the north side of the canal or race which runs on the north side of Boudinot Street, and running from thence (1) in a straight line with the north side of said canal in Boudinot Street westerly along the southlines of part of the aforesaid vacant mill lot and long the south line of the Mallory mill lot 133 feet 6 inches to an iron stake; (2) thence north 22 degrees west partly along the west line of said Mallory mill lot 196 feet to the Passaic River; (3) thence westwardly up and along said river 140 feet to the northwest point of a large hard rock lying on the east side of the waste way from the middle canal and its junction with the said river; (4) thence southerly in a direct line 107 feet to the northwest point or corner of a large square hard rock lying the rear of the nail factory and on the east side of said last mentioned waste way; (5) from thence southerly 22 feet to the southwest corner of the wheel house wall of the present nail factory; (6) thence easterly along the south wall of the mail factory wheel house 8 feet being to the east face of the wall supporting the flume which conveys the water to the nail factory; (7) thence southerly in a direct line to the northeast corner of a heavy abutment wall which sustains the east side of the middle canal and north bulkhead of same; (8) thence southerly along the east face of said wall and abutments sustaining said middle canal, a part of which forms the west end of present rolling mill with the several courses thereof to the northeast corner of the wall which supports the present flume or waste way conveying the water eastward from the middle canal to the one in Mill Street; (9) thence easterly along the north wall of said last mentioned waste way 170 feet to a point where the curvature of the race wall begins; (10) thence along the said curve of said race 46 feet to a point in the line with the west side of Mill Street; (11) and from thence northerly in a direct line 62 feet to the place of beginning."¹

It was In October of 1813, that Samuel Colt, John Colt, and Nicholas Delaplaine bought a portion of the Gun Mill lot from the S.U.M., intending to build a nail factory and rolling mill.² The boundary line of the parcel began:

"on the west side of Mill Street at the northeast corner of the waste way from present upper canal, running thence northerly along the west side of Mill Street and west side of mill lot on Boudinot Street heretofore sold said parties of the second part to the northwest corner of said last mentioned lot say on the whole line 292 feet; thence westerly 264 feet to a stake on the brow of the hill; thence southerly to the northeast corner of the present upper canal 92 feet; thence along the east side of the present upper canal to the northwest corner of the waste way 66 feet; thence easterly along north side of said waste way 218 feet the place of beginning."²

and with the plot came the privilege of drawing one square foot of water from the Society's upper canal. Buildings were erected, with the rolling mill occupying the site of the later Gun Mill, to eventually produce hoop and sheet iron, boiler plate and copper sheathing.⁴ The progeny of John Colt, John Colt Jr., recited a detailed description of the operation in a conversation with William Nelson, about 1884;

"The rolling mill was completed in the fall of 1812 (sic: probably 1813). They made in the Rolling Mill, shovels, spades, camp kettles, frying pans, etc. for the army etc. In 1814 the nail mill was started. At the close of the war the business was broken up...

During the war, they began making nails.

After the peace, the nail business was continued for some years, but eastern and Pennsylvania Mills under-sold the Paterson establishment. The building was frame, with high roof, shingled; it was whitewashed inside. In the Nail Mill forty headers were employed.

In the Rolling Mill---

The iron was heated by wood furnaces, employing many teamsters and wood-choppers. About a dozen men were employed in the Rolling Mill.

The firm bought Swedish and Russian iron in New York. English iron was too brittle. The iron was bought in strips nine or ten feet long and as wide as a nail is long; from this the nails were cut, and headed by hands. Afterwards the nails were made by one operation."⁵

Seventy men were employed in the manufacture of nails,⁶ according to one source.

Nicholas Delaplaine dropped out of the partnership in 1818, selling his interest in the land to Samuel and John Colt.⁷ Four years later, John Colt became the sole proprietor, with his purchase of Samuel Colt's half interest.⁸ Fisher, in his first census of Paterson, in 1825, records that "John Colt's Rolling and Nail Factory" employed 30 hands to manufacture 7 tons of metal products a week. In the next census, output has grown to 8-1/2 tons weekly, while the work force has declined to 25 men, probably reflecting the use of a mechanical nail-heading device. The work-force further declined to 23 men, by the time of the 1829 census, but so too did the nail output, to 13,440 lbs. weekly, reflecting the declining fortunes of the business. "One blacksmith shop, 2 fire and three hands, J. Colt." is the only mention of the Gun Mill lot in Fisher's census of 1832.

In the face of a failing iron works, John Colt sold the lot and building in 1829 to his Paterson Manufacturing Company, which was successfully weaving cotton duct at Passaic Mill #1.⁹ Apparently, the Paterson Mfg. Co. let the factory buildings out, for in 1834, Affleck and Dunmire had a millwright and jobbing shop in the old Nail factory,¹⁰ which they shared with the Barrow's woolen factory.¹¹ In 1836, the Paterson Mfg. Company bought the remainder of the Gun Mill lot from the S.U.M.¹²

The entire Gun Mill lot, including all, "the buildings, flumes, furnaces, wheels, fixtures and machinery...(except the nail machines and black smith tools which are to be removed)", was leased in May of 1836 to the Patent Arms Manufacturing Company,¹³ which had been capitalized by a number of prominent New York financiers, among them Thomas Emmet and John Ehlers. Organized to manufacture Samuel Colt's newly patented repeating fire-arm, the company found the nail factory totally insufficient, tore it down, and had constructed a four story, cut brownstone structure, 100x40 feet.¹⁴ Trumbull describes the works:

"On the spire which surmounted the bell-tower was a vane very elaborately made in the design of a finished gun, and in front of the mill was a fence, each picket being a wooden gun, and the whole was very beautifully painted. There was a number of small buildings attached to the mill proper, and over the raceway was an office..."¹⁵

Within this factory complex, the first revolver was produced.

Christopher Colt, a brother of Samuel Colt, was granted permission in 1838 to establish a small silk mill on the fourth floor of the Gun factory. After processing only one bale of raw silk, it became apparent to Christopher Colt and his New York backers that the operation could not be run profitably, and the silk shop was abandoned, the machinery left to rust. In the winter of 1839, or the spring of 1840, George Murray, a pioneer manufacturer of white-lead pigment, purchased the machinery and floorspace from Christopher Colt, and installed John Ryle, an English silk worker, as manager of the silk work with three or four operatives beneath him. The rent for the space was \$400 per annum, to be paid out of the sale of sewing silks. Trumbull claims that Murray-Ryle works produced the first skein of sewing silk spun in the United States.¹⁷

The owners of the land, the Paterson Mfg. Co., sold it in 1840 to the SUM,¹⁸ who sold it a month later to Roswell Colt.¹⁹ Throughout that year, and the two successive years, the Patent Arms Company was issuing mortgages on their plant to cover the great expenses of running the gun factory. Between 1840 and 1842, the company borrowed \$18,141.62 on 13 different mortgages.²⁰ As it became obvious that the company's creditors would soon demand foreclosure of the property, Ryle and Murray looked from the fourth floor to see \$60,000 worth of gun-making machinery hidden from the Sheriff beneath coal heaps.²¹ The factory was nonetheless seized in the fall of 1842, and sold at a public auction to John Ehlers, the Patent Arm Co.'s biggest creditor,²² who sold one-fourth of his interest in the property to Thomas Emmet, another creditor, the same day.²³

Henry M. Low, John Edwards, Abram Prall and Abraham Godwin, sub-leased the third floor of the now largely vacant mill, and began to spin cotton under the label of H.M. Low and Company.²⁴ With the retirement of Messrs. Low and Edwards, the two remaining partners renamed the firm A. Prall and Company, and in November of 1845, bought out Thomas Emmett's one-fourth interest in the Gun Mill lease and buildings.²⁵ One floor above the cotton works, the silk manufactory was turning out 800 to 1,000 pounds of silk weekly.²⁶ Rapidly filling the fourth floor, the Ryle-Murray combine refitted the fifth floor with a skylight in 1846, and thereafter used it as a weaving shop.²⁷ The first two floors of the Gun mill remained vacant, until 1846.

That year, John Ehlers assigned his three-fourths interest in the Gun Mill Lot lease to John Ryle,²⁸ who immediately occupied the first floor of the mill, and leased the second floor to A. Prall and Company. (Murray had retired in early 1846). With the demand for silk blossoming, Ryle found it necessary to construct a two story stone mill on the western side of the original mill, and soon after, a building 167 feet long, 100 feet of which are 40 feet wide, and 67 feet of which are 20 feet in width, built between the old mill and the river. A dye house was built adjoining the new building. From 1846 to 1850, about 350 hands were employed to make tram, organzine, sewings, twists and materials for trimming.²⁹

Ryle completed his acquisition of the Gun Mill lot lease with his purchase of the outstanding one-fourth interest that Godwin and Prall had bought from Emmet, and had sold to him in 1852.³⁰ About 1853, Ryle rented one of the rooms in the mill to John Birchenough, who moved on to aquire the lease the Beaver Mill the following year.³¹

In 1857, with the failure of Ryle to handled his long-term credit obligations, the Ryle Silk works failed. The firm reorganized, and Ryle recommenced silk manufacturing, this time in partnership with his nephew, William Ryle.³² In October of that year, John Ryle sold the entire leasehold to the Gun Mill lot to Reuben and William Ryle, probably in the process of reorganization, for the elder Ryle continued to use the Gun Mill as a silk works throughout this period. Reuban and William Ryle return the lease to John Ryle in 1859, receiving exactly what they had paid for the property.³³

Moving to their newly constructed Godwin mill in 1858, A. Prall and Company left two floors of the Gun Mill empty. Two cotton manufacturing firms filled the vacancy in 1859. Osborne Buckley and Company began operations in that year, and within a few months, ran 1,152 spindles, consuming 3,000 lbs. of cotton weekly, and employing 25 hands.³⁴ Andrew Snyder, Alexander Rae, and Andrew Vreeland, in the partnership of Snyder, Rae and Company, started the same year with 1,728 spindles, 40 operatives and a weekly consumption of 4,500 lbs. of cotton in a space 130x40 feet. Their product was hank yarn. In 1860, they installed steam engines for power, and by 1865, a work force of 65 was employed. By this time, the firm had become May, Rae and Co., with Charles May succeeding Snyder.³⁵

In 1870, Albert King rented one of the out buildings on the Gun Mill lot for his dye works. He remained on the lot for three years, after which he left his shop, left Paterson and joined the Oneida Community.³⁶ While King was heading north, the machinery of the Osbourne, Buckley and Company shop was heading south, sold to a Mr. Howell in Georgia, to be used in a cotton mill there.³⁷ The vacant space attracted Joshua Mason, who sought space for his machine shop after a fire in the Van Winkle machine shop on the Phoenix lot had destroyed his shop and his partnership with Van Winkle. Moving to the Gun Mill lot in 1875, Mason spent several years perfecting a radiator for steam heating, which subsequently became the famous, and very successful, "Mason Radiator". In 1876, the Ryle Silk concern, after several reorganizations, merged with the Pioneer Silk Company.³⁹ Continuing to occupy the Gun Mill through 1881 was May, Rae and Company, who, after 1878, were known as the Enterprize Maufacturing Co. They

had doubled their floor space to two rooms, 40x130, and increased their consumption to 6,000 lbs. of cotton weekly by 1881.⁴⁰ The Pioneer Silk Company processed waste silk and pierced cocoons at their Gun Mill works up to 1880.⁴¹

John Ryle died in 1887, and the excutors of his estate sold his estate lease on the Gun Mill lot to the John Ryle Real Estate Association, a corporation, in 1892.⁴² This company continued to hold and renew the lease on the Gun Mill lot until 1933, when it surrendered it to the S.U.M.⁴³ The society had bought the lot in 1930 from the N.J. General Security Company,⁴⁴ who had acquired from the estate of Lady Steele, and Barnard College between 1915 and 1916.⁴⁵ Lady Steele was a descendant of the Colt's and Barnard College had fallen heir to its share by an alumna descendant.

Footnotes: The Gun Mill Lot

1. Essex L-630
2. Essex D-27
3. Ibid.
4. Sci. Am. p. 314.
5. Nelson, "Conversation with John Colt"
6. Sci. Am. p. 314.
7. Essex C 329.
8. Essex F 121.
9. Essec I-9.
10. Trumbull p. 79
11. Freeman, Map of Paterson, 1834.
12. Essex L 630
13. Essex L 624.
14. Trumbull, p. 167.
15. Ibid.
16. Trumbull, p. 171.
17. Ibid. p. 172.
18. Passaic Deeds H-426.
19. Passaic Deeds D-198
20. Passaic Deeds B 97, B 254-281.
21. Trumbull p. 169.
22. Trumbull F 536.
23. Trumbull p. 540
24. Trumbull p. 56
25. Trumbull I 364.
26. Trumbull p. 173.
27. Ibid. 173.
28. Ibid. L 38.
29. Trumbull 174.
30. Trumbull A 320, misc.
31. Trumbull 179.
32. Trumbull 180.
33. Trumbull F-2, 198.
34. Sci. a.m. 314.
35. Trumbull 57.
36. Trumbull 184.
37. Ibid. 57.
38. Ibid. 95.
39. ibid. 181.
40. Ibid. 57.
41. Ibid. 233.
42. Passaic Deeds: C-11, 93.
43. Passaic Deeds: O-37, 147.
44. Passaic Deeds: E-36, 389.
45. Passaic Deeds: O-25, 451.